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Elazığ İlinde Eczacılarda Algılanan Sağlık ve Sağlıklı Yaşam Biçimi Davranışlarının İncelenmesi

Examination of Perceived Health and Healthy Lifestyle Behaviors by Pharmacists in Elazig

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ÖZ

Amaç: Bu çalışmada, sağlık çalışanları arasında önemli yer tutan eczacıların, sağlıklı yaşam biçimi davranışları (SYBD) ve algılanan sağlık düzeyleri ile bunları etkileyen faktörlerin irdelenmesi amaçlanmıştır.

Materyal ve Metot: Kesitsel tipte olan bu araştırmaya dahil edilen 132 eczacıya iki bölümden oluşan anket uygulanmıştır. İlk bölümde sosyodemografik özellikler, sağlıklı yaşam biçimi davranışlarını etkilediği düşünülen faktörler ve algılanan sağlık ile alakalı sorular, ikinci bölümde ise SYBD Ölçeğinden oluşan bir anket uygulanmıştır.

Bulgular: Algılanan sağlık ölçeğine göre %73,5'i sağlığını iyi (mükemmel/çok iyi/iyi), %26,5'i ise kötü (orta/kötü) olarak değerlendirmiştir. SYBD ölçeği puanının; mesleklerinden memnun olanlarda olmayanlara, sigara içmeyenlerde içenlere, düzenli egzersiz yapanlarda yapmayanlara, uyku problemi yaşamayanlarda yaşayanlara ve algılanan sağlık ölçeğine göre sağlığını iyi olarak değerlendirenlerde kötü olanlara göre daha yüksek olduğu belirlenmiştir ($p<0,05$).

Sonuç: Araştırma kapsamına alınan eczacılarda SYBD ölçeğinden alınan puan ortalamasının orta düzeyde olduğu ve eczacıların dörtte birinin algılanan sağlık ölçeğine göre sağlıklarını kötü olarak değerlendirdiği belirlenmiştir.

Anahtar Kelimeler: Algılanan sağlık, eczacı, sağlıklı yaşam biçimi davranışları

ABSTRACT

Objective: The study aimed to investigate the Healthy Lifestyle Behavior (HLSB) and perceived health levels in pharmacists, who are important healthcare professionals, and the factors that affected these parameters.

Materials and Methods: A two-part questionnaire was applied to 132 pharmacists included in this cross-sectional study. In the first part, a questionnaire consisting of sociodemographic characteristics, factors thought to affect healthy lifestyle behaviors and perceived health-related questions was applied, and in the second part, a questionnaire consisting of the HLPS Scale was applied.

Results: Based on the perceived health scale, 73.5% rated their health as good (excellent/very good/good) and 26.5% as bad (moderate/bad). It was determined that HLSB scale score of those who were satisfied with their profession was higher than those who were not, of those who did not smoke was higher than those who did, of those who exercised regularly was higher than those who did not, of those who did not have sleep problems was higher than those who did, and of those who consider themselves healthy was higher than those who did not ($p<0.05$).

Conclusion: It was determined that the mean HLSB of the participating pharmacists was moderate and one fourth of the pharmacists considered themselves as unhealthy based on the perceived health scale.

Keywords: Healthy lifestyle behavior, perceived health, pharmacist

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INTRODUCTION

The measures taken by individuals, who consider themselves healthy and do not exhibit disease symptoms, to stay healthy are considered as health behavior.[1] Perceived health is an easily applicable self-report scale employed to measure health to determine the physical, mental and social health of individuals.[2] Perceived health is closely associated with the objective health and living conditions and is a strong indicator of health problems.[3] In previous studies, the perceived health determined based on a single question correlated with physical examination findings and certain clinical measurements.[2,4]

A healthy lifestyle is a component of the promotion of health. Promotion of health, which is an important factor in public health and preventive medicine, allows individuals to increase and improve their control over their health.[5,6] Based on the World Health Organization (WHO) estimates, the cause of 70-80% of mortality in developed countries and 40-50% of mortality in developing countries were lifestyle-induced diseases.[7] It is known that these diseases could be controlled, and mortality would decrease among individuals who internalize healthy lifestyle behavior.[8]

Healthcare professionals are expected to prioritize their health and healthy lifestyle behavior. Pharmacists are also belonging to the group, assistance of which is frequently required by the society, are consulted on issues such as diseases and prescriptions, and should be a role model for the society similar to other healthcare professionals. In a study conducted in Turkey, the percentage of the patients who applied to a pharmacist before a physician was 48.1%, which was associated with the fact that the pharmacist was both easily accessible and provided free consultation.[9] The fact that a large number of individuals could easily access pharmacists, who are a respectable group in the society, on health issues and receive free services led to the social attraction that this professional group enjoys about public health interventions.[10]

The closeness of the pharmacists to the public facilitates their role as consultants, educators and healthy lifestyle behavior models. In domestic literature, there are studies on healthy lifestyle behavior of healthcare professionals employed in hospitals such as nurses or physicians or other professionals who are pioneers in the society. However, there are limited studies on healthy lifestyle behaviors and health perceptions of pharmacists. The present study aimed to determine the healthy lifestyle behavior and perceived health levels of pharmacists, who play an important role as healthcare professionals in Elazig province, and the factors that affected these parameters.

MATERIALS AND METHODS

Ethical Status: The field study was conducted in April-June 2018 after the ethics committee and administrative approvals were obtained from Fırat University, Non-Interventional Research Ethics Committee (Date: 14/12/2017, decision no: 01).

The population of the present cross-sectional study included 162 pharmacists, including 125 self-employed pharmacists, 31 public sector pharmacists, and 6 pharmacists employed in private hospitals and pharmaceutical distribution centers in Elazig province urban center. The entire population was included in the study, and 132 people completed the survey (response rate: 81.5%). The criteria for inclusion in the study were employment as a pharmacist in Elazığ urban center and to volunteer to participate in the study. The first section of the survey included factors that were considered to affect healthy lifestyle behavior and perceived health levels and was developed based on the literature review, and the second section included the HLSB Scale II. The first section of the survey was conducted as questions and answers and the second section was conducted under direct observation. The pilot scheme of was conducted with 10 pharmacists to check the comprehensibility of the items and they were not included in the sample.

The Perceived Health Scale determines the perceived health of the individuals based on a single question: "How do you consider your general health?" The participant responses of "excellent", "very good" and "good" are considered to reflect "good health," and the responses of “moderate” and “bad” are considered as “poor health”. In a study conducted by Erengin and Dedeoğlu in 1997, it was demonstrated that the scale was a powerful indicator in the determination of the general health of the society.[2]

Walker et al. developed the Healthy Lifestyle Behavior Scale in 1987 with 48 items and 6 subgroups. The scale, which was revised by Walker et al. in 1996, was renamed the Healthy Lifestyle Behavior Scale II.[11] The validity and reliability of the Turkish language version of the scale was determined by Bahar et al in 2008 and the Cronbach alpha coefficient was determined as 0.92. The Cronbach alpha coefficient of the original scale was 0.94 and the reliability of the Turkish version of this scale was considered high. In our study, the Cronbach alpha value was determined as 0.89. The scale includes 52 items in 6 sub-factors. Sub-factors include health responsibility (Cronbach alpha value=0.88), physical activity (Cronbach alpha value=0.90), nutrition (Cronbach alpha value=0.92), spiritual development (Cronbach alpha value=0.87), interpersonal relationships (Cronbach alpha value=0.89), and stress management (Cronbach alpha value=0.90). The overall

scale score reflects healthy lifestyle behavior. All scale items have positive scores. It is a 4-point Likert-type scale and each item is scored as never (1), sometimes (2), often (3), and regularly (4). The lowest scale score is 52, the highest score is 208. As the total score increases, it is accepted that the person has more healthy lifestyle behaviors.[12]

Statistical Analysis: Analyzes were evaluated in 22 package programs of SPSS (Statistical Package for Social Sciences; SPSS Inc., Chicago, IL). In the study, descriptive data are shown as n and % values in categorical data, and mean±standard deviation (Mean±SD) values in continuous data. Conformity of continuous variables to normal distribution was evaluated with Kolmogorov-Smirnov test. Student's t test was used to compare binary categories, and One Way ANOVA test was used to compare more than two categories. Pearson correlation analysis was performed to examine the relationship of the measurement data. The statistical significance level in the analyzes was accepted as $p<0.05$.

RESULTS

Among the participants, 39.4% were female and 60.6% were male, and the mean age was 38.0±12.0 (min:24, max:72). 73.5% of the pharmacists were self-employed, 26.5% were employed in the public sector, and 24.2% held a graduate degree. 70.5% of the participants stated that they were married, 29.5% were unmarried. 42.4% of the participants considered their socioeconomic level as good, 57.6% as medium/bad. 76.5% of the group stated that they were satisfied with their profession. 36.4% of the pharmacists reported that they smoked, 12.1% used alcohol, 55.3% diet regularly, and 25.0% exercised regularly. Also, 10.6% stated that they experienced sleep problems, and 22.0% had a chronic disease. 73.5% of the pharmacists perceived their health as good (excellent/very good/good) and 26.5% perceived their health as moderate/bad (Table 1).

Table 1. Participant socio-demographics.

		Mean ± SD	
Age		38.0±12.0	
Professional seniority		13.5±11.9	
Daily sleep		7.1±1.0	
		n	**%**
Gender	Male	80	60.6
	Female	52	39.4
Marital status	Married	93	70.5
	Unmarried	39	29.5
Perceived income level	Good	56	42.4
	Medium/Poor	76	57.6
Educational level	Undergraduate	100	75.8
	Graduate	32	24.2
Professional status	Self-employed	97	73.5
	Public	35	26.5
Professional satisfaction	Yes	101	76.5
	No	31	23.5
Chronical disease	Yes	29	22.0
	No	103	78.0
Hobbies	Yes	88	66.7
	No	44	33.3
Smoking	Yes	48	36.4
	No	84	63.6
Alcohol consumption	Yes	16	12.1
	No	116	87.9
Application to healthcare during the previous year	Yes	105	79.5
	No	27	20.5
Regular diet	Yes	73	55.3
	No	59	44.7
Regular exercise	Yes	33	25.0
	No	99	75.0
Sleep problems	Yes	14	10.6
	No	118	89.4
Perceived health	Good (excellent/very good/good)	97	73.5
	Moderate/poor	35	26.5

It was determined that the mean HLSB scale score of the pharmacists was 132.84±20.89 (min:88, max:197), and health responsibility subscale score was 21.56±4.47, physical activity subscale score was 16.62±5.33, nutrition subscale score was 21.66±4.40, spiritual development subscale score was 27.09±4.31, interpersonal relationships subscale score was 26.14±3.97, and stress management subscale score was 19.75±4.12. The health responsibility sub-dimension scores of the females were significantly higher when compared to males (p=0.033). The spiritual development (p=0.044) and interpersonal relationships (p=0.01) subscale scores of the married individuals were significantly higher when compared to the unmarried participants.

There were no significant differences between the total scale and subscale scores based on income level (p>0.05). The nutrition (p=0.013), spiritual development (p=0.001), interpersonal relationships (p=0.028), stress management (p=0.001), and total scale scores (p=0.003) were significantly higher in pharmacists who were satisfied with the profession than those who were not.

Spiritual development (p=0.025) and total scale scores (p=0.042) of non-smokers were significantly higher than smokers. The physical activity (p=0.044), nutrition (p=0.037) and stress management (p=0.032) sub-dimension scores of those with a regular diet were significantly higher than those who did not eat regularly. The physical activity (p<0.001), nutrition (p<0.001), stress management (p=0.001) and total scores (p<0.001) of those who exercised regularly were significantly higher than those who did not. The spiritual development (p=0.001), interpersonal relationships (p=0.006), stress management (p<0.001) and total scores (p=0.015) of those with sleep problems were significantly lower than those without sleep problems. The sub-dimension and total scores of those who perceived their health status as good (excellent/very good/good) were significantly higher than those who perceived their health as moderate/poor (p<0.05) (Table 2, Figure 1).

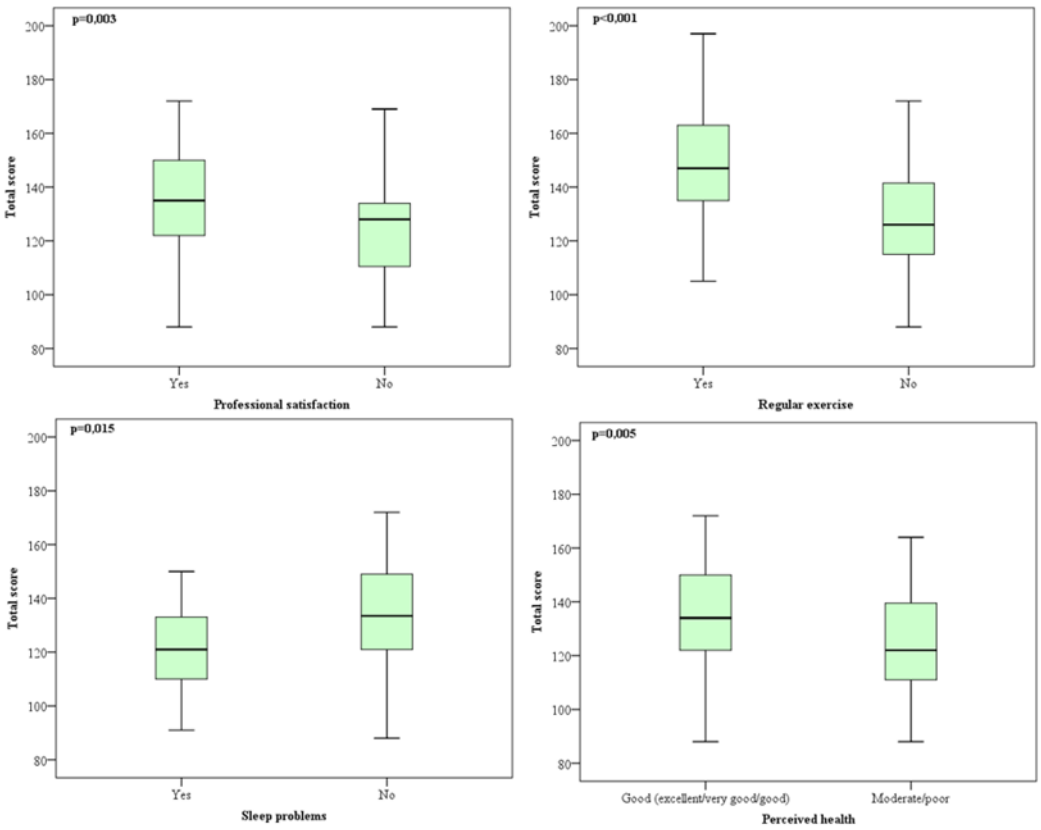

Figure 1. Comparison of scale scores based on various variables.

Tablo 2. HYBD Scale Score Distribution of Pharmacists by Demographic, Health and Social Variables.

		Health responsibility		Physical activity		Nutrition		Spiritual development		Interpersonal relationships		Stress management		Total	
		Mean±SD	p	Mean±SD	p	Mean±SD	p	Mean±SD	p	Mean±SD	p	Mean±SD	p	Mean±SD	p
Gender	Male	20.9±4.5	**0.033**	16.9±5.5	0.438	21.4±4.6	0.436	27.2±4.6	0.846	25.7±4.1	0.134	19.9±3.8	0.667	132.0±22.0	0.563
	Female	22.6±4.2		16.2±5.0		22.0±4.1		27.0±3.8		26.8±3.7		19.6±4.6		134.2±19.2	
Marital status	Married	22.0±4.4	0.132	16.5±5.1	0.755	21.8±4.4	0.518	27.6±4.0	**0.044**	26.7±3.8	**0.01**	20.0±4.1	0.304	134.6±19.9	0.135
	Unmarried	20.6±4.6		16.8±5.8		21.3±4.4		25.9±4.8		24.8±4.2		19.2±4.1		128.6±22.7	
Income level	5,000 and below	21.5±4.5	0.477	16.7±5.2	0.510	21.8±4.3	0.288	26.7±4.9	0.499	25.9±3.9	0.761	19.8±4.3	0.210	132.6±21.7	0.372
	5.001-9.999	21.1±4.7		16.0±4.9		20.8±4.5		27.2±4.1		26.5±4.5		19.0±3.9		130.3±20.8	
	10.000 and above	22.3±4.5		17.4±6.0		22.4±4.5		27.8±3.7		26.4±3.3		20.7±4.2		137.0±20.4	
Professional satisfaction	Yes	21.8±4.4	0.346	17.1±5.3	0.075	22.2±4.5	**0.013**	27.8±4.1	**0.001**	26.6±3.7	**0.028**	20.4±4.0	**0.001**	135.8±20.3	**0.003**
	No	20.9±4.6		15.1±5.2		20.0±3.6		24.8±4.3		24.8±4.4		17.5±3.8		123.1±20.0	
Smoking	Yes	20.6±4.7	0.055	16.0±5.8	0.282	21.1±4.5	0.287	26.0±4.9	**0.025**	25.4±3.7	0.084	19.2±4.4	0.220	128.0±23.5	**0.042**
	No	22.1±4.3		17.0±5.0		22.0±4.3		27.7±3.8		26.6±4.1		20.1±3.9		135.6±18.8	
Regular diet	Yes	21.6±4.7	0.922	17.4±5.8	**0.044**	22.4±4.6	**0.037**	27.5±4.3	0.190	26.2±4.1	0.844	20.4±4.0	**0.032**	135.7±21.8	0.076
	No	21.5±4.1		15.6±4.5		20.8±4.0		26.5±4.3		26.1±3.9		18.9±4.1		129.3±19.3	
Regular exercise	Yes	22.8±4.7	0.057	22.4±4.0	**<0.001**	24.6±4.6	**<0.001**	28.2±3.7	0.076	27.1±4.1	0.103	21.8±4.5	**0.001**	147.3±19.4	**<0.001**
	No	21.1±4.3		14.7±4.2		20.7±3.9		26.7±4.4		25.8±3.9		19.1±3.8		128.0±19.2	
Sleep problems	Yes	21.3±4.0	0.804	14.8±5.3	0.174	20.9±4.0	0.469	23.6±3.9	**0.001**	23.4±3.9	**0.006**	16.1±3.3	**<0.001**	120.1±18.4	**0.015**
	No	21.6±4.5		16.8±5.3		21.8±4.4		27.5±4.2		26.5±3.9		20.2±4.0		134.3±20.7	
Perceived health	Good (excellent/very good/good)	22.1±4.6	**0.038**	17.2±5.6	**0.026**	22.2±4.5	**0.033**	27.9±3.9	**<0.001**	26.7±3.7	**0.007**	20.1±4.1	0.074	136.0±20.3	**0.005**
	Moderate/poor	20.2±3.9		15.1±4.1		20.3±4.0		24.9±4.6		24.6±4.3		18.7±4.0		124.1±20.4	

Two groups were evaluated with Student's t test; triple groups were evaluated with One Way ANOVA.

There was a negative correlation between age, professional seniority and the daily sleep duration, and a positive significant correlation between age, professional seniority and BMI, nutrition, spiritual development, interpersonal relationships, stress management sub-dimension and total scale scores. There was a significant negative correlation between sleep duration and BMI (Table 3, Figure 2).

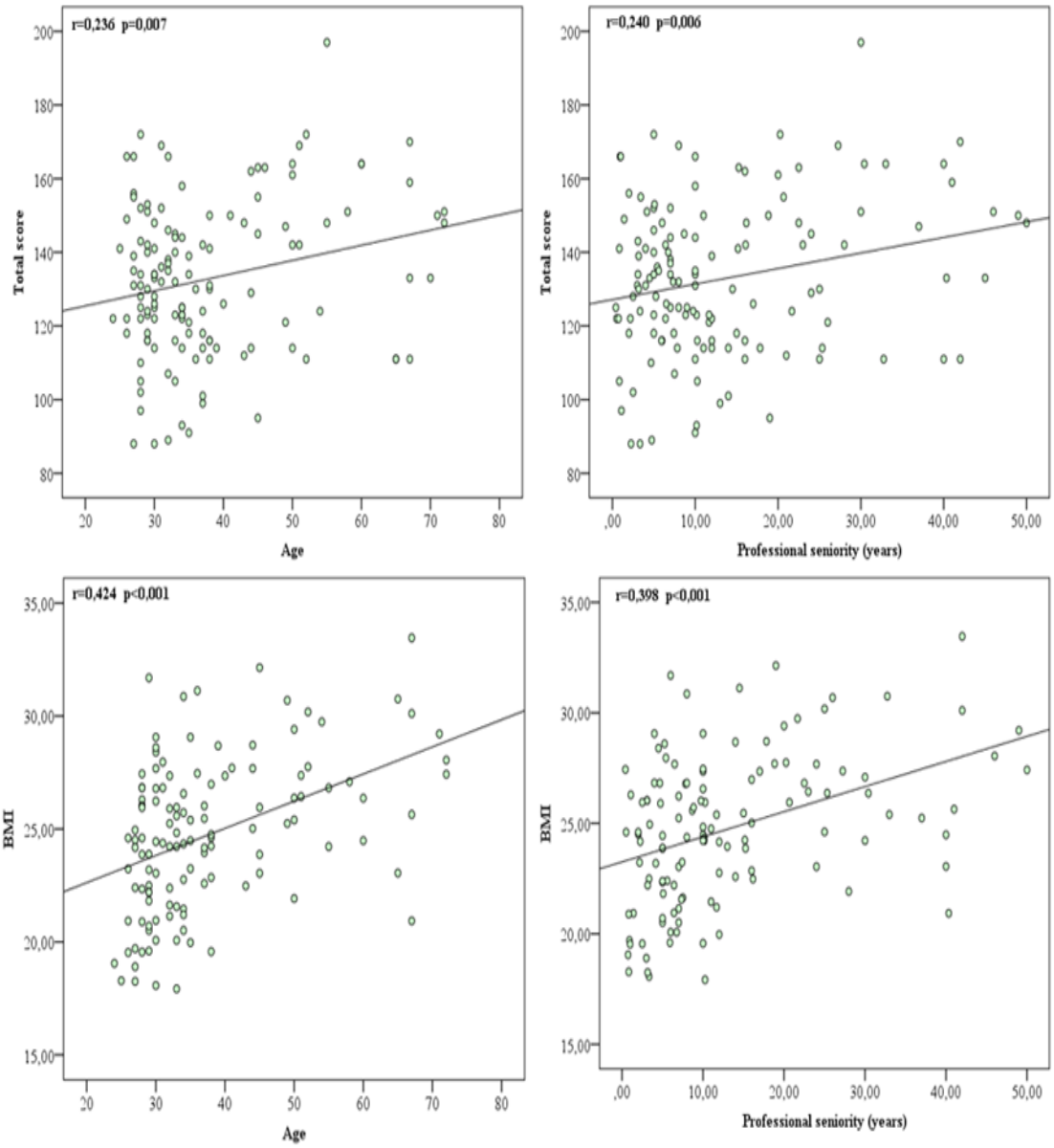

Figure 2. The correlations between scale scores, age, BMI and professional seniority.

Tablo 3. Correlation of age, time to practice pharmacy, daily sleep time, BMI and Scale scores.

		Age	Professional seniority	Daily sleep	BMI	Health responsibility	Physical activity	Nutrition	Spiritual development	Interpersonal relationships	Stress management
Daily sleep	r	**-0.315**	**-0.280**								
	p	**<0.001**	**0.001**								
BMI	r	**0.424**	**0.398**	**-0.203**							
	p	**<0.001**	**<0.001**	**0.024**							
Health responsibility	r	0.036	0.033	0.034	-0.171						
	p	0.681	0.707	0.696	0.057						
Physical activity	r	0.069	0.089	0.075	-0.113	**0.526**					
	p	0.430	0.313	0.393	0.212	**<0.001**					
Nutrition	r	**0.280**	**0.253**	0.112	-0.006	**0.604**	**0.612**				
	p	**0.001**	**0.003**	0.200	0.944	**<0.001**	**<0.001**				
Spiritual development	r	**0.206**	**0.217**	0.067	0.083	**0.541**	**0.385**	**0.514**			
	p	**0.018**	**0.012**	0.446	0.357	**<0.001**	**<0.001**	**<0.001**			
Interpersonal relationships	r	**0.223**	**0.235**	0.075	0.025	**0.546**	**0.309**	**0.440**	**0.706**		
	p	**0.010**	**0.007**	0.393	0.780	**<0.001**	**<0.001**	**<0.001**	**<0.001**		
Stress management	r	**0.297**	**0.308**	0.170	0.063	**0.461**	**0.567**	**0.625**	**0.655**	**0.509**	
	p	**0.001**	**<0.001**	0.051	0.488	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	
Total	r	**0.236**	**0.240**	0.112	-0.028	**0.783**	**0.751**	**0.815**	**0.795**	**0.728**	**0.807**
	p	**0.007**	**0.006**	0.199	0.754	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**

DISCUSSION AND CONCLUSION

The present study aimed to analyze the perceived health and HLSB levels of pharmacists employed in an urban center. On HLSB, previous studies were conducted with a particular group of healthcare professionals such as nurses or pharmacists,[13,14] as well as studies on groups other than healthcare professionals that investigated the correlation between health perceptions and HLSB.[15]

In the study, it was determined that 73.5% of the pharmacists perceived their health as good based on the Perceived Health Scale; however, the mean HLSB scale score was 132.84 ± 20.89, and the HLSB was considered "moderate." In a study conducted by Aksoy and Uçar with the same scale on pre-service nurses, it was determined that the mean scale score of the students was 136.12 ± 19.16.[13] Also, in a study by Çetiner and Ulupınar, where the healthy lifestyle behavior of non-healthcare professional hospital staff were analyzed, it was determined that the total HLSB score of the hospital staff was moderate, and no significant difference was determined between the HLSB scale total scores of the healthcare professional and non-healthcare professionsl hospital staff.[14] The pharmacists and other healthcare professionals are expected to have higher healthy lifestyle behavior as role models for the society.

In the present study, the highest participant scores were in spiritual development and interpersonal relations sub-dimensions in the HLSB scale, respectively, and the lowest scores were in physical activity and stress management sub-dimensions. In a study conducted with pre-service nurses, it was determined that the interpersonal relations subscale mean score of the students was the highest, physical activity score was the lowest, and stress management score was the second lowest.[13] Similar findings were reported in a study conducted with physicians.[17] A high interpersonal relationships score was expected in pharmacists. Furthermore, physical activity, which is one of the healthy lifestyle parameters, and stress management scores were expected to be high due to their professional attributes.

In our study, spiritual development and interpersonal relations scores of married individuals were significantly higher than unmarried individuals (Table 2). Similarly, Çakır et al.[16] and Yanık et al.[17] reported that the spiritual development score of married individuals was higher than unmarried individuals in a study conducted with physicians and healthcare professionals. High exogenous mental health findings such as spiritual development and interpersonal relationships in married individuals could be associated with the social impact of living with a partner.

Among the participating pharmacists, it was determined that HLSB scale total score of those who were satisfied with their profession was higher than those who were not, of those who did not smoke was higher than those who did, of those who exercised regularly was higher than those who did not (Table 2). Similarly, Arpağ et al.[18] reported that the HLSB total score of those who were satisfied with the profession and non-smokers were higher, Yanık et al.[17] reported that the score of those who exercised regularly was higher, Uçar[19] reported that the HLSB total score of non-smokers were higher, and Aksoy et al.[13] reported that the scores of those with longer sleep duration was higher. Behavior is an important variable in health education. When the health behavior is categorized as those that improve health and those that harm health, the behavior that harm the health include behavior that negatively affect human health such as smoking, excessive alcohol consumption, excessive fatty food consumption, and fast-food diet. The behavior that improve health include behavior that protect individuals from diseases such as sports, and an adequate and balanced diet.[20] It was suggested that behavior expected to contribute to health would improve healthy lifestyle levels among pharmacists.

Based on the Perceived Health Scale, it was determined that the total HLSB score of the pharmacists who perceived good health was significantly higher than those who perceived poor health (Table 2). There was a significant correlation between perceived health and healthy lifestyle behavior. As people start to feel healthy, they feel a motivation to improve their health. Studies demonstrated that participants with good perceived health (excellent, very good, good/good, very good/moderate, good, very good) tend to adopt behavior that preserve or improve health.[21,22] In other words, when individual perceives to be healthy, healthy lifestyle behavior increase significantly.[15]

In the present study, it was observed that there was a positive significant correlation between professional seniority and total scale score (Table 3). In a study conducted by Çakır et al.[16], a negative but not significant correlation was reported between the professional seniority as a physician and the HLSB scale score. Similarly, in a study conducted by Kolaç et al.[23], as the seniority of factory workers increased, HPSB score decreased, but the correlation was not statistically significant. The presence of the difference in our study could be associated with the attributes of the pharmacy profession.

The fact that the present study was conducted only with pharmacists who were employed in an urban center could be considered as a strength. However, the present study findings could not be generalized to the nation and limited to the region.

In conclusion, it was determined that the mean HLSB score of the participating pharmacists was

moderate and one fourth of the pharmacists perceived themselves in poor health. The lowest scores were obtained in the HLSB scale physical activity and stress management sub-dimensions, respectively. The HLSB scale scores of the pharmacists could be improved with courses that would be organized by professional associations or the state and participative applications on factors that reduce health behavior. Avoidance of smoking, regular activities and regular sleep may increase healthy lifestyle behaviors in pharmacists.

Ethics Committee Approval: This study was approved by the clinical research ethics committee of the name and/or university (Date: 18/12/2017, decision no: 236458)

Conflict of Interest: No conflict of interest was declared by the authors.

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